

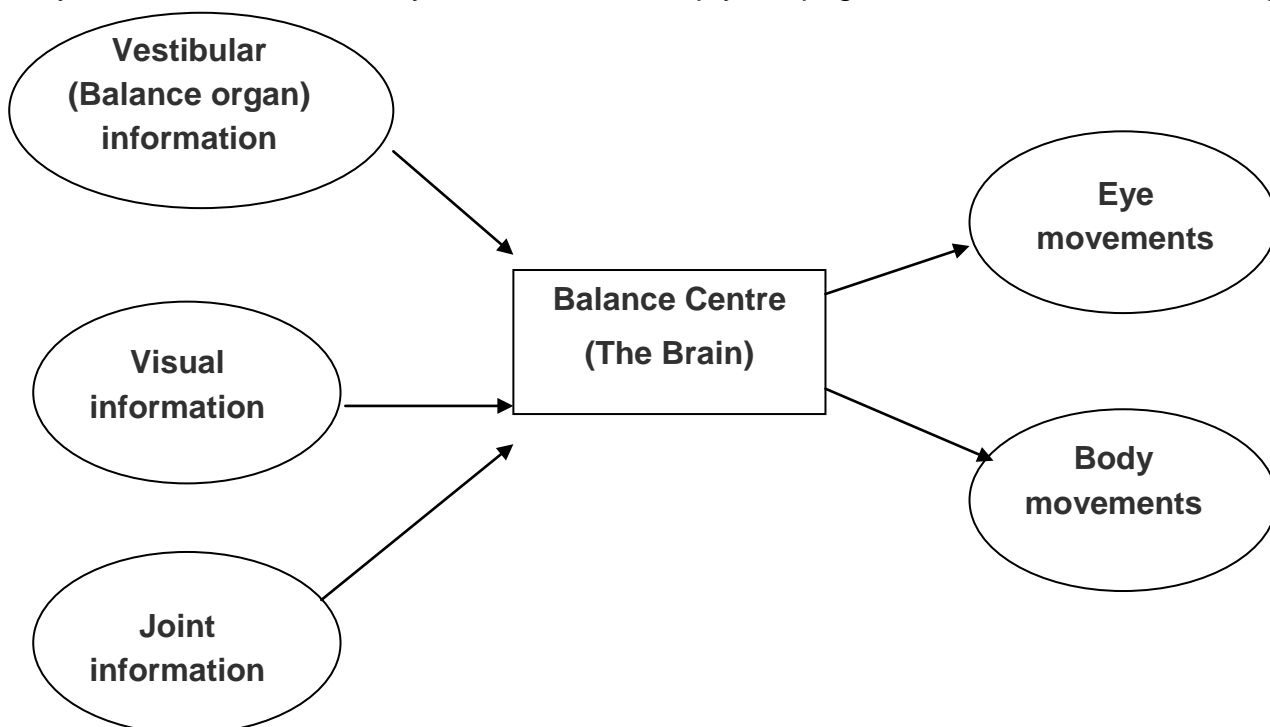
Balance exercises for older patients

The balance system

To maintain your balance the brain uses information from 3 different inputs to determine where your head and body are in relation to your surroundings. These are:

- Balance organs (Vestibular System)
- Eyes (Visual System)
- Muscles and Joints (Proprioceptive information)

This information is integrated in the brain which then sends signals to your eyes to keep your vision stable and to your muscles to keep you upright when still and when moving



- As we get older the inputs which are needed to maintain balance deteriorate with age e.g. eye sight problems such as cataracts impair the visual information, information coming from the joints and muscles is reduced and less information is conveyed from balance organs.
- Age related changes can cause balance problems in themselves or you may have a specific balance organ problem. Your clinician will have explained any balance organ problems diagnosed in your appointment and whether the information from either one or both of the balance organs was impaired.

- Another reason why you may be experiencing “dizzy” symptoms could be a combination of age related deterioration and a balance organ problem.
- **But** whatever symptoms you are experiencing the exercises described in this leaflet will allow the system to recalibrate if there is a specific balance organ problem and improve your balance.

Exercises

- **The exercises which are described below should be carried out at a speed or level of difficulty which just starts to provoke a sensation of dizziness or make you feel mildly imbalanced. This may vary from day to day and depending on how tired you feel.**
- **Your symptoms should subside between each repetition of each exercise. Do not go onto the next exercises before all symptoms of imbalance have gone.**
- It is important that you understand the limits of your own mobility. The clinician who designs your exercise plan initially will take this into account, to ensure that the exercises are carried out safely and in a controlled environment.

Exercises should be completed ____ times a day. However, if you are feeling tired or unwell only do as much as you feel able.

Important note:

- Stop and rest if you feel you have had enough of that particular exercise.
- If you are finding them difficult, carry out the exercises slower paying particular attention to one aspect of the exercise.

You must stop if any exercises cause you neck / back pain / severe dizziness / chest pain / fainting or a change in hearing and tinnitus.

Warm up

This is important before any exercise plan. Make sure you are in loose fitting clothes with flat comfortable shoes. Do the following sitting:

- Shrug your shoulders up to your ears and then down again.
- Twist your head slowly to the right and left and repeat.
- Nod your head slowly up and down and repeat.
- Shrug your shoulders again.
- Circle your arm and shoulders round first forwards twice and then backward twice.
- Stretch a leg out in front of you so it is parallel to the floor. Repeat and then do your other leg.
- Shrug your shoulders again and then take some deep slow breaths.

You are now ready for your exercises!

Your clinician will circle the exercises which are the most suitable for you. Do not complete any of the exercises they have not recommended.

Ensure your safety at all times

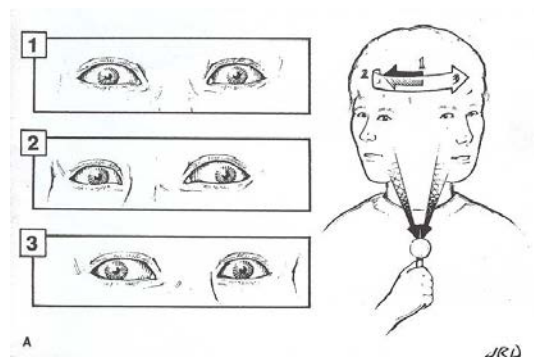
Eye and head movement exercises

These exercises should be completed while sitting down and care should be taken with respect to any neck and back problems. Carry out the exercises in a supportive chair with arms.

Remember to do the exercises at a level which just starts to provoke mild dizziness or imbalance

Exercise 1

- Keep your head still.
- Focus on a pen.
- Move the pen slowly from left to right 10 times.
- Relax and let your symptoms subside and repeat _____



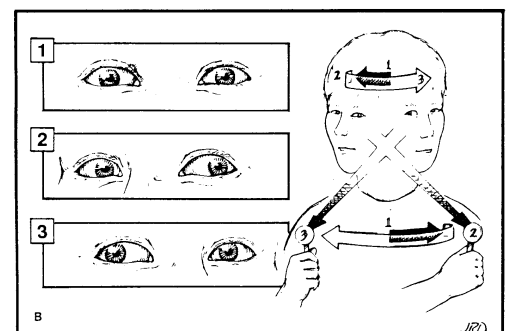
Picture from: vestibular rehabilitation
Herdman

Exercise 2

- Shake your head slowly for _____ whilst focussing on a letter written on a card at a level where the letter begins to jump.
- Relax and let your symptoms subside and repeat _____

Exercise 3

- Move your head in one direction whilst focussing on a letter which you move in the opposite direction.
- Complete small head movements whilst keeping the letter in focus.
- Relax and let your symptoms subside and repeat _____



Picture from: vestibular rehabilitation -
Herdman

Exercise 4

- Shake your head slowly 10 times with eyes open.
- Relax and repeat for _____
- Shake your head slowly 10 times with eyes closed.
- Relax and repeat for _____

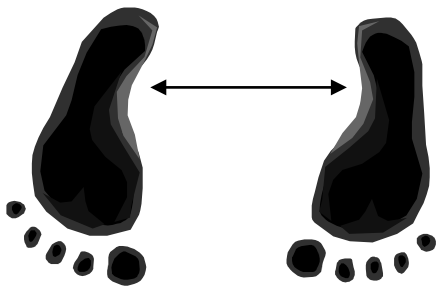
Exercise 5

- Nod your head slowly with your eyes open.
- Relax and repeat for _____
- Nod your head slowly with your eyes closed.
- Relax and repeat for _____

Standing balance

Once again it is important to ensure your safety. It is preferable that someone watches you whilst performing the following exercises. If this is not possible ensure they are completed in a safe area (free from clutter) and in a position where you can be supported in case you lose your balance i.e. in a corner of the room with a soft chair or by a bed. If you feel as if you are falling or very unbalanced stop the exercise and regain your balance. Rest for a few minutes sitting on a chair before starting again.

Exercise 1 - stand feet apart



Eyes Open

Eyes Closed

Time

Exercise 2 - stand feet together



Eyes Open

Eyes Closed

Time

Exercise 3 - modified “sharpened Romberg”



Eyes Open

Eyes Closed

Time

Exercise 4 - "sharpened Romberg"



Eyes Open

Eyes Closed

Time

Exercise 5 - One leg stance



Eyes Open

Eyes Closed

Time

Other balance exercises

1. Knee Bends. Holding onto a table/chair slowly bend your knees as if you were about to sit. Then rise to standing. Repeat ____ times
2. Sit to Stand. Rise to standing from a sturdy chair with arms. Try this using/ not using the arms. Repeat ____ times.



Picture from
www.uwhealth.org

Walking exercises

Try and walk either along a hallway or a through sitting room - dining room. **Ensure the hall or room is well lit and there is nothing for you to fall over.**

1. Walk slowly down a hallway. Concentrate on good posture and walking technique. Try not to look to the floor or use the wall for support and try and walk in a straight line.
2. Walk ____ paces then stop. Turn your head slowly left, then right and then back to the centre. Repeat ____ times.
3. Walk slowly with a slow head turn. Repeat ____ times.
4. Walk slowly with a slow head nod. Repeat ____ times.
5. Walk backwards slowly. Repeat ____ times.

6. Walk sideways slowly. Repeat ____ times.
7. Walk slowly for ____ steps, then stop and turn 180° so you are facing the opposite direction. Repeat ____ times.
8. Walk slowly heel to toe. Repeat ____ times.
9. Walk slowly up the stairs. Use the banister if you need to and try and alternate feet rather than using two feet per stair. Once you get to the top, have a rest and then come down again. Repeat ____ times.

Walking plan

This is to improve your confidence in your walking ability especially when you are outside.

- Aim to walk for _____ minutes per day on 2-3 days per week.
- If you prefer you can break this up into shorter blocks that you can spread through the day.
- Walking should be included as part of your normal activities if possible.
- Start off by walking on the pavement along a quiet road. Gradually try increasing the difficulty of your walk, for example by:
 - Including crossing the road, turning your head left and right to check for traffic.
 - Including gentle upward and downward slopes in your walk
 - Walking on grass or gravel
 - Walking in a busy place such as in a shop

If you have any concerns or need further advice about your exercises or your balance, then contact the Balance Team in the Audiology Department on 0118 322 7238.

For further information about the Trust, visit our website www.royalberkshire.nhs.uk/audiology

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If you would like this leaflet in other languages or formats (e.g. large print, Braille or audio), please contact the Audiology department.

Department of Audiology
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